

The opinion in support of the decision being entered today was *not* written for publication in a law journal and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

*Ex parte* DIRK P. GUNTHER, ELLIS L. JOHNSON,  
LADISLAV LETTOVSKY, and BARRY C. SMITH

---

Appeal 2006-3334  
Application 09/658,866  
Technology Center 3600

---

Decided: March 14, 2007

---

Before TERRY J. OWENS, ANITA PELLMAN GROSS, and  
ROBERT E. NAPPI, *Administrative Patent Judges*.

GROSS, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Gunther, Johnson, Lettovsky, and Smith (Appellants) appeal under 35 U.S.C. § 134 from the Examiner's final rejection of claims 1 through 17, which are all of the claims pending in this application.

Appellants' invention relates to a computer implemented method for optimizing an airline schedule. Claim 1 is illustrative of the claimed invention and reads as follows:

1. A computer implemented method for optimizing a schedule of legs employed by at least one service provider in transporting objects between geographic markets, the method comprising the steps of:

- a) identifying a set of itineraries for serving each market in a set of markets, each itinerary comprising one or more legs;
- b) generating a set of market plans for each of a plurality of markets, wherein the set of market plans for each market comprises a plurality of market plans with each market plan comprising a modified set of the itineraries for the market;
- c) individually determining the profitability of each market plan for each market following generation of [sic, a]new set of market plans for each of the plurality of markets; and
- d) selecting from the set of market plans for each market a subset optimizing overall profit of the schedule while accounting for resources of a service provider, wherein the subset of market plans is selected following a determination of the profitability of each market plan for each market,

wherein at least one of the identifying, generating, determining and selecting steps is performed by a computer processor.

The prior art reference of record relied upon by the Examiner in rejecting the appealed claims is:

Barlow US 5,652,867 Jul. 29, 1997

Claims 1 through 4, 6, 7, 11 through 14, 16, and 17 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Barlow.

Claims 5, 8 through 10, and 15 stand rejected under 35 U.S.C. § 103 as being unpatentable over Barlow in view of Official Notice.

We refer to the Examiner's Answer (mailed January 30, 2006) and to Appellants' Brief (filed November 14, 2005) and Reply Brief (filed March 29, 2006) for the respective arguments.

#### SUMMARY OF DECISION

As a consequence of our review, we will reverse the anticipation rejection of claims 1 through 4, 6, 7, 11 through 14, 16, and 17 and also the obviousness rejection of claims 5, 8 through 10, and 15.

#### OPINION

Appellants contend (Br. 9) that Barlow fails to teach or suggest the claimed steps of generating a plurality of market plans for each of a plurality of markets and then individually determining the profitability of each market plan for each market. Specifically, Appellants contend (Br. 9) that Barlow generates a single plan at a time for each market and makes multiple modifications to that single market plan. Thus, Barlow does not disclose generating a set of market plans for each market. We agree.

The Examiner (Answer 3) directs our attention to column 4, lines 15-45 for the step of generating a set of market plans for each of plural markets. Lines 15-45 of column 4 describe first obtaining all itineraries (origin-destination data including connecting points) for all markets of interest for all airlines to create origin-destination record 16. Record 16 is a single global market plan which includes all itineraries for all markets. Barlow does disclose (col. 4, ll. 28-31) that a user may select a particular market in

building origin-destination record 16, which suggests that a separate market plan can be generated for each market. However, Barlow still only generates one plan per market. Next, a determination is made for each origin-destination pair as to whether two services exist (one superior to the other), and all of the inferior services are eliminated from record 16 to create a new record 16 (or new plan for each market). Once the changes are made, only the new record 16 exists. In other words, Barlow fails to generate a set of market plans for each market, as recited in part (b) of claims 1 and 11. Instead Barlow teaches a single market plan for each market at any given time.

Appellants further contend (Br. 10) that Barlow fails to disclose the claimed step of selecting from the set of market plans for each market the subset of plans that optimize the overall profit of the schedule. We agree. Barlow discloses (col. 5, ll. 45-47) that a market share estimate is calculated for each individual market and (col. 6, ll. 1-3) that an airline's revenue potential in a given market is determined. However, the calculations are done for the single generated plan for each market, not for plural plans for each market. Since Barlow has only a single market plan per market, Barlow fails to teach or suggest selecting from the set of plans for each market, as recited in part (d) of claims 1 and 11. Since Barlow fails to teach or suggest all of the claimed limitations, Barlow cannot anticipate independent claims 1 and 11, and their dependents, claims 2 through 4, 6, 7, 12 through 14, 16, and 17.

Regarding the obviousness rejection of claims 5, 8 through 10, and 15, independent claim 8 includes the same limitations found lacking from Barlow, *supra*. The Examiner (Answer 5) relies on Barlow in the same manner described above, depending on Official Notice for the additional limitations. However, the Examiner's Official Notice fails to cure the deficiencies set forth, *supra*. Accordingly, we cannot sustain the obviousness rejection of claims 5 and 15, dependent upon claims 1 and 11, respectively, nor of independent claim 8 and its dependents, claims 9 and 10, for substantially the same reasons explained above.

ORDER

The decision of the Examiner rejecting claims 1 through 4, 6, 7, 11 through 14, 16, and 17 under 35 U.S.C. § 102(b) and claims 5, 8 through 10, and 15 under 35 U.S.C. § 103 is reversed.

REVERSED

vsh

ALSTON & BIRD LLP  
BANK OF AMERICA PLAZA  
101 SOUTH TRYON STREET, SUITE 4000  
CHARLOTTE, NC 28280-4000